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A REVIEW ON - DETECTION OF UNAUTHORIZED LOGO OF PRODUCT WITH SMARTPHONE APPLICATION

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ABSTRACT:

The main aim of the method that we are focusing on is that to detect the logo which are mainly product based the logo is detected and recognize for the authorization and non-authorization of logo for various product with context dependent which referred to class of similarities for logo detection and matching on context dependent similarity(CDS)The interest points of two images match if their local neighbours match, and if the neighbours of their local neighbours match the overall system will be going to be Mobile Application based which will provide the user with exact and fast detection and comparison of logo with accuracy occlusion factor.

Keywords: Logo Detection, context Dependent Similarity, Mobil Application,

1 INTRODUCTION

According to recent trend each and every product is having specific graphics logos for the popularity of their product but each and every product is having a particular logo which defines the standard and product related information for the company.Logo matching is important nowadays to detect non-authorized use of logos. Logo detection used to bedone in high quality images only. But using the proposed method, logos with partial occlusion can also be detected and the accuracy of logo recognition is also high. Logo detection will avoid the piracy and replication of Product. In our system design we are matching and detecting logo with Mobile Application To recognize unauthorized logo of product which will differentiate in between authorize and unauthorized logo of multiple product. Logos are the graphical representation of the production that either anamnesis some planet object ,or accent a reputation and show some specific abstract sign that have effectiveness and attractiveness of that particular brand Many corporation company brands changes their logos with time to stay in progress with their changing business. The version of product cans b change and according to that the logo can b verify for the new version.

Logos are seen in mostly images posters and videos of planet depend upon object of the other pure mathematics, shoes of a person T-shirt and shirt of various brand each and every Application of various product in the most of the cases they are subjected to outlook the transformation and typically corrupted by noise or lighting effective or partly obstructed.So to avoid replication and fraud related to various product for various industry like medical field, clothing field electronic good etc. so comparisons of logos to prevent replication of product for multiple application using various

algorithm with the help of Smartphone application to make awareness of authorization.

2 Related Works

In Early work on the logo detection and reorganization was totally depend and supported automatic logo registration method in this only logo is checked that the new logo is coming is already present in the given database if the logo is not matched its get stored.

D Rajasulochna, J. Ajayanthis paper focused on replication of product for multiple applications using various algorithms to avoid replication of logos. The interest of two images match if there local neighbors match and if the neighbors of their local neighbors match.

S. Shamini, Dr.N.Jaisankar This paper totally focus on a new class of similarities based on Modified Context Dependent Algorithm which enhances the performance in terms of accuracy in logo matching and computation time.

Hichemsahbi, Lamberto Ballan This paper contribute the design of a novel vibrational framework able to match and recognize multiple instances of multiple references logos in images Archive.

H.sahbi, J. –Y Audibert, R. Kerivan Was planned a new sort of kernel and object using context free Algorithmic program for locating similarities points between 2 logos.

Y. Kalantidis, L. G. Pueyo, M. Trevisiol, R.VanZwol Was projected the cluster of option in triple victimization multi scale triangulation and finally signatures were extract. The number of triangular per category varies a lot depends on image resolution, logo complexness, but memory and reorganization speed remains unaffected in signature index.

3 PROPOSED SYSTEM

3.1 Pre-Processing

Pre-processing is a very important technique that is typically carried out to filter the noise and to upgrade the image before any operation. Four filters specifically Mean, Median, Gausian and Weiner filters are used to remove noise here. And their Peak signal to noise magnitude relation is calculated. The image with high PSNR value is employed for further process.

4.1.1 Mean filter

Mean filter is a simple spatial filter and simple to implement technique to get rid of the noise in pictures, i.e. reducing the number of intensity variation between one pixel and also the next. It is often used to filternoise in pictures. It is a sliding-window technique that takes over the cente r value with the common mean of the entire pixel Values within the kernel or window.

3.1.2 Median filter:

Median Filter may be a simple and powerful nonlinear filter. Median filter is employed for filtering the number of intensity variation between two pixels. Instead of restoring the pixel value with the mean of neighbouring pixel values, it replaces it with the median of these values.

3.1.3 Wiener filters:

Weiner filter minimizes the noise and inverts the blurring at the same time. It reduces the mean square error within the method of inverse filtering and noise smoothing.

3.1.4 Gausians filter:

Gausian filters are used to blur the images and reduce noise because they need a property of

supporting the time domain that is equal to the frequency domain. The Gausian filters have the minimum time bandwidth product.

4 : SYSTEM ARCHITECTURE

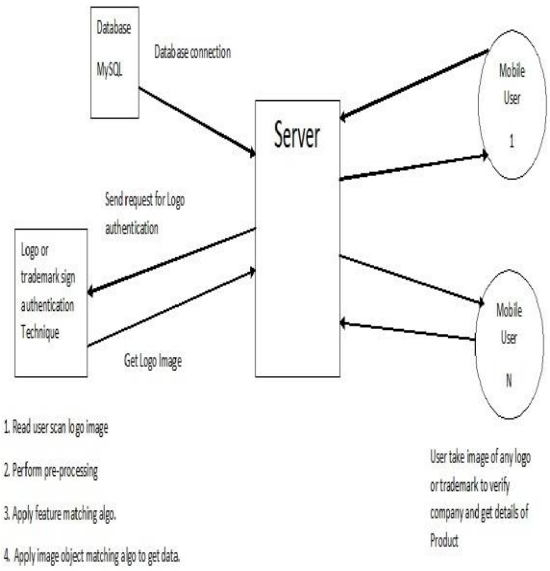

Fig:-1 - Block Diagram of System Architecture

The proposed system has been enforced using the subsequent similarity rule and perform the below steps for detection of unauthorized Logo for various product.

Input: Read the Test Logo Image.

Output: After performing various algorithm and Pre-processing original logo image is detected.

Step-1: Read the user scan logo image with the help of Mobil Application

Step-2: Perform Preprocessing on the scan logo by user using various filters.

Step-3: Apply feature Matching Algorithm on the filtered logo image.

Step-4: Apply logo image object matching algorithm to get the actual data

5 CONCLUSION:

Logo matching is important nowadays to detect non-authorized use of logos. Logo detection used to bedone in high quality images only. But using the proposed method, logos with partial occlusion can also be detected andthe accuracy of logo recognition is also high. Logo detection will avoid the piracy and replication of Product.

In our system design we are matching and detecting logo with Mobile Application to recognize unauthorized logo of product which will differentiate in between authorize and unauthorized logo of multiple product.

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